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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SWANSON & BRATSCUN L.L.C.
1745 SHEA CENTER DRIVE
SUITE 330
HIGHLANDS RANCH, CO 80129

EXAMINER

FLORY, CHRISTOPHER A

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/782,638

Applicant(s)

HAIRFIELD, WADE E.

Examiner

Christopher A. Flory

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/17/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Tucek (US Patent Publication 2004/0138708, hereinafter referred to as Tucek'708).

Regarding claim 1, Tucek'708 discloses an electrode (Fig. 5, electrode 11) comprising an outer cylindrical conductor (Fig. 2, winding 25; paragraph [16]); an inner cylindrical conductor (Fig. 1, first electrode 23; paragraph [16]); a plurality of members securing the inner cylinder inside the outer cylinder (Fig. 2, cap 21 and base 22; paragraphs [15] and [16]); a power source connected to the inner and outer cylinders (paragraph [17]) suitable for supporting a current flow of between 0.1 and 4 amps between the cylindrical conductors of the electrodes (paragraphs [17] and [23]-[27]); an open topped basin sized sufficiently large to hold the electrode and a user's feet (Fig. 5, foot bath 12) submersed in a conductive liquid contained within the basin (Fig. 5, water 14; paragraph [22]); and wherein the power source has a failsafe circuit breaker preventing a set power limit from passing between the electrodes (Fig. 4, fuses 44; paragraph [17]).

Regarding claim 3, Tucek'708 discloses a bolt with an insulating sleeve (Fig. 2, post 26 and fitting 27; also, base 22 can be considered an insulating sleeve).

Regarding claim 4, Tucek'708 discloses a stand forming an insulator between the conductors (Fig. 2, base 22; paragraphs [15] and [16]).

Regarding claim 5, Tucek'708 discloses that the power source can comprise an AC/DC transformer based circuit (paragraph [17] having a fuse (Fig. 4, fuses 44), a circuit breaker (either fuses 44 or removeably attachable male plug 29 in Fig. 2 is a circuit breaker), and a timer (paragraph 20).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucek'708.

Regarding claims 2 and 6, Tucek'708 discloses the invention substantially as claimed, but does not explicitly disclose that the electrode have outer cylinder dimensions of 2 inches wide and 3 inches high, and the inner cylinder have dimensions of 1 inch wide and 4 inches high, or that the surface area ratio of the outer conductor to the inner conductor is about 3:2. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the

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Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. In the case of the instant application, the claimed dimensions of the electrode would create the same stimulating and ozonizing effect as any electrode of smaller or larger size, such as that of the embodiment disclosed in Fig. 6 of the instant application. Therefore, the claim limitations to size do not distinguish over the electrode of Tucek'708. Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention to construct an electrode of the claimed size or ratio, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges (*In re Aller*, 105 USPQ 233) or optimum value of a result effective variable (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)) involves only routine skill in the art.

5. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ostrow (US Patent 5,741,317, hereinafter referred to as Ostrow'317) in view of Bässler et al. (US Patent 4,410,495, hereinafter referred to as Bässler'495).

Regarding claims 1 and 4, Ostrow'317 discloses an electrode (column 1, lines 41-59); a power source to both the anode and cathode (Fig. 7, anode 82 and cathode 84); a basin having conductive fluid therein (ABSTRACT; column 4, lines 32-38) with the electrode immersed in the fluid (Fig. 1; column 5, line 63 through column 6, line 6); and a stand forming an insulator between the conductors (column 5, lines 62-67—the

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plastic tub in which the electrodes are housed is considered to be the insulating stand between the conductors).

Ostrow'317 discloses the claimed invention but does not disclose expressly the electrode comprising an outer cylindrical conductor and an inner cylindrical conductor. In the same field of endeavor, Bässler'495 teaches an ozonizer formed of an interior electrode in the form of an electrically conducting tube arranged concentrically [to]...at least two parallel electrically conducting sleeves, which are separated axially relative to one another and surrounding the insulating tube to form the exterior electrode of the ionizer" (ABSTRACT; Fig. 1, inner tube 1 and exterior electrode 2) for the purpose of economical ozone production (column 2, lines 14-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system as taught by Ostrow'317 with the ozonizer as taught by Bässler'495 to provide the Ostrow'317 system with the same advantage of more economical ozone production (motivation to combine provided by Bässler'495, column 2, lines 14-17).

Alternatively, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the system as taught by Ostrow'317 with the electrode comprising an outer cylinder and inner cylinder, because Applicant has not disclosed that the electrode provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the plate electrodes as taught by Ostrow'317, because it provides an anode and cathode array for providing electrical stimulation to the user's body and ozonization of the water in the tub, and

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since it appears to be an arbitrary design consideration which fails to patentably distinguish over Ostrow'317. Furthermore, it has been held that making an inventive element separable, e.g. replacing the housed electrode of Ostrow'317 with the disconnected electrode of the instant application, involves only routine skill in the art (In *re Nerwin v. Erlichman*, 168 USPQ 177, 179). Therefore, it would have been an obvious matter of design choice to modify Ostrow'317 to obtain the invention as specified in the claims.

Ostrow'317 et al. does not explicitly disclose that the power source include a circuit breaker. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a circuit breaker since it is known in the art that circuit breakers provide a necessary safety circuit to protect the health or, in extreme cases, the life of the user. Therefore, the claim limitation of a circuit breaker does not distinguish over the prior art. Alternatively, in the same field of endeavor, Bässler'495 teaches a circuit breaker (Fig. 1, exploded view 'A', break-over diodes 7) to shunt current from one conductor to the other in order to reverse polarity of the electrode. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Ostrow'317 with the circuit breaker/switching diodes as taught by Bässler'495 in order to provide Ostrow'317 with the same advantage of being able to completely and repeatably switch current and voltage from one conductor to the other to switch electrode polarity.

Ostrow et al. does not explicitly disclose that the current between the conductors should range from 0.1 to 4 amps. However, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to use an operable range of 0.1 to 4 amps, since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In this case, it is known that current below 0.1 amps is of insufficient magnitude for a human to detect, while currents above 4 amps may become dangerous to the user.

Regarding claims 2 and 6, Ostrow'317 does not explicitly disclose that the electrode have outer cylinder dimensions of 2 inches wide and 3 inches high, and the inner cylinder have dimensions of 1 inch wide and 4 inches high. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. In the case of the instant application, the claimed dimensions of the electrode would create the same stimulating and ozonizing effect as any electrode of smaller or larger size, such as that of the embodiment disclosed in Fig. 6 of the instant application. Therefore, the claim limitations to size do not distinguish over the electrodes of Bevan et al. and Bässler et al.

Regarding claim 3, Ostrow'317 in view of Bässler'495 discloses the invention substantially as claimed except for the connecting member comprising a bolt having an insulating sleeve. It would have been within the skill of the art to substitute the

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insulating tube retaining element of Bässler'495 with bolt and insulating sleeve as claimed in the current application, since they are alternate equivalents and it has generally been held to be within the skill level of the art to substitute alternate equivalent expedients. Therefore, the limitations of claim 3 do not distinguish the instant application over the prior art.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ostrow'317 in view of Bässler'495 as applied to claim 1 above, and further in view of Kurokawa et al.

Ostrow'317 in view of Bässler'495 discloses the claimed invention substantially as claimed except for a power source that includes a timer. In the same field of endeavor, Kurokawa et al. teaches the use of an operation timer (Fig. 9, operation timer switch 56). Kurokawa et al. does not explicitly state why the operation timer is used, but it appears that the operation timer is used to provide the user the ability to control the amount of time that the heating and electrolytic water producing elements are active, thus selecting a desired length of treatment. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system as taught by Ostrow'317, with the timer as taught by Kurokawa et al., since such a modification would provide the system with a means for providing the user with the ability to select a length of treatment using the invention (motivation to combine provided by Kurokawa et al.).

Response to Arguments

7. Applicant's arguments, see pages 6-7, filed 17 August 2006, with respect to the rejection of claim 1 under 35 U.S.C. 102(b) as anticipated by Erni'744 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

8. Applicant's arguments, see page 7, lines 25-30, filed 17 August 2006, with respect to claims 1-6 as rejected under 35 U.S.C. §103(a) as being unpatentable over Bevan in view of supporting documents have been fully considered and are persuasive. The rejections of claims 1-6 as unpatentable over the Bevan reference have therefore been withdrawn.

9. Applicant's arguments with respect to the rejection of claims 1-6 under 35 U.S.C. §103(a) have been considered but are moot in view of the new ground(s) of rejection.

Specifically regarding the arguments directed towards the rejection of claim 5 using the Kurokawa reference (see page 9 of the file submitted 17 August 2006), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves **or in the knowledge generally available to one of ordinary skill in the art**. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is well within the

common knowledge of one of ordinary skill in the art to conclude that a timer, such as the one disclosed in Kurokawa et al. is used to provide the user the ability to control the amount of time that the heating and electrolytic water producing elements are active, thus selecting a desired length of treatment.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Flory whose telephone number is (571) 272-6820. The examiner can normally be reached on M - F 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher A. Flory
26 October 2006


George Manuel
Primary Examiner